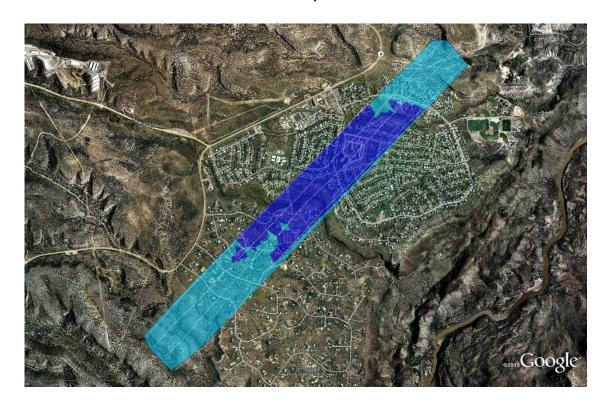
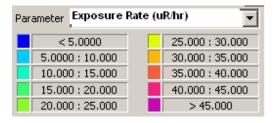
# White Rock Area Exposure Rate Contour Map June 29, 2011







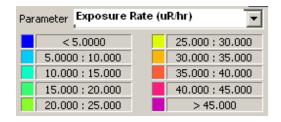
### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 9  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

## Los Alamos East Area Exposure Rate Contour Map June 29, 2011





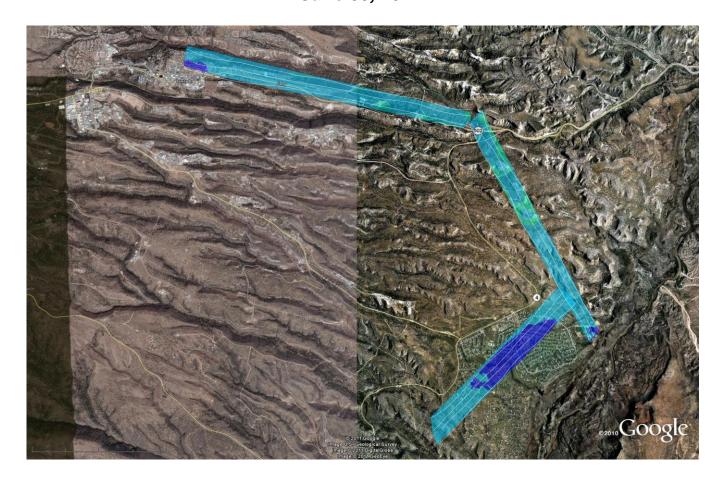


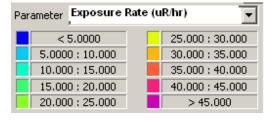
#### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 12  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

## Los Alamos Survey Areas Exposure Rate Contour Map June 30, 2011





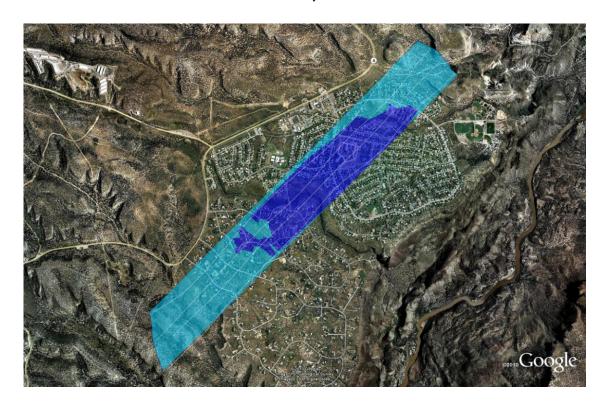


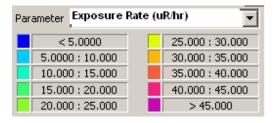
#### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu$ R/hr. The maximum exposure rate for this survey was 12  $\mu$ R/hr. This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

# White Rock Area Exposure Rate Contour Map June 30, 2011







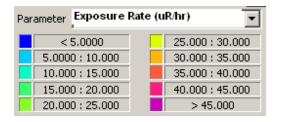
### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 9  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

## Los Alamos East Area Exposure Rate Contour Map June 30, 2011





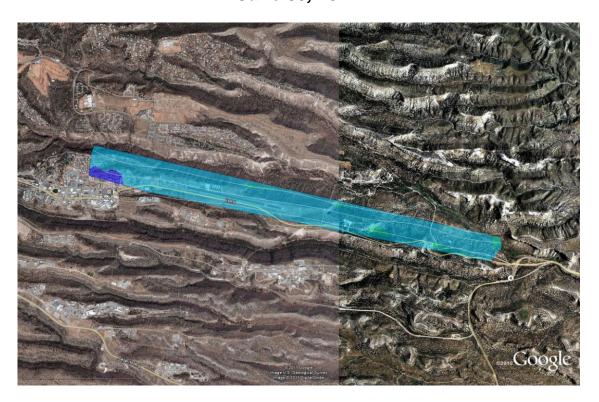


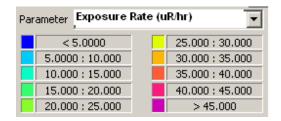
#### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 12  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

## Los Alamos City Area Exposure Rate Contour Map June 30, 2011





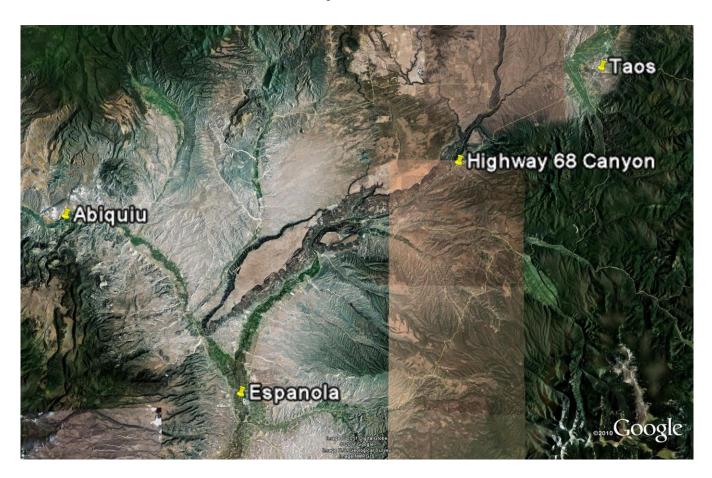


#### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

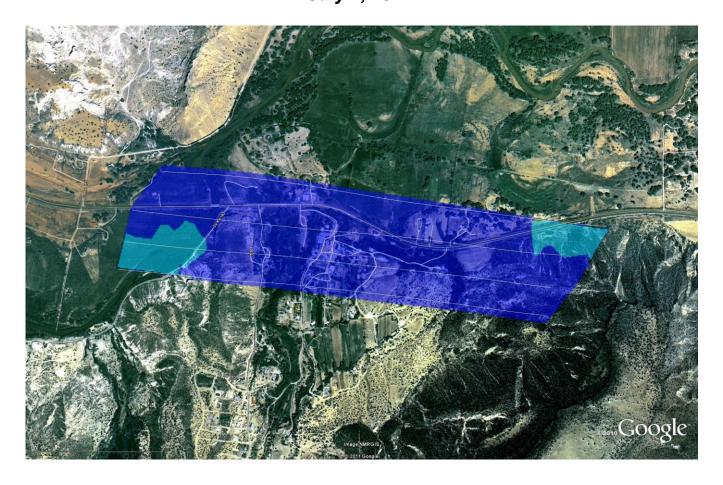
Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu$ R/hr. The maximum exposure rate for this survey was 12  $\mu$ R/hr. This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

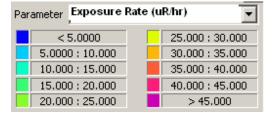
## Survey Areas July 1, 2011





## Abiquiu Survey Area Exposure Rate Contour Map July 1, 2011





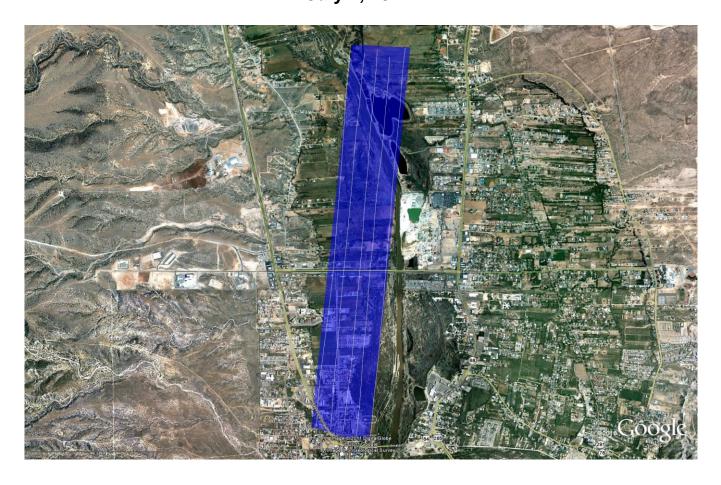


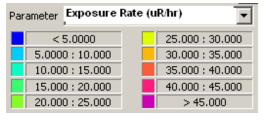
#### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 6  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

## Espanola Survey Area Exposure Rate Contour Map July 1, 2011







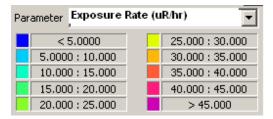
#### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 5  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

## Highway 68 Canyon Survey Area Exposure Rate Contour Map July 1, 2011





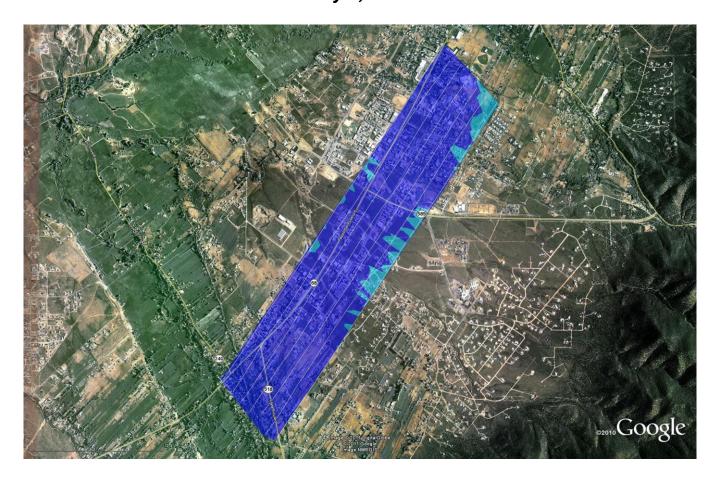


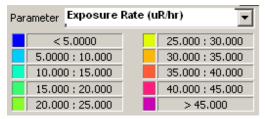
#### **Flight Parameters**

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 8  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

## Taos Survey Area Exposure Rate Contour Map July 1, 2011







#### **Flight Parameters**

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 5  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

## **Brief Discussion of Results**

### Chemical

No significant chemical detections. Minor detections of the following chemicals were measured from greatest to lowest concentrations:

- 1. Ozone,
- 2. Formic acid,
- 3. PAN (peroxyacetyl nitrate, "smog"),
- 4. Methanol, and
- 5. Ammonia

These minor detections are consistent with what is normally found in natural fires.

## Radiological

No significant radiological detections.

## **Photography**

Aerial photographs were collected over Abiquie (5), Espanola (9), Taos (10) and active fire areas (15).

## **Infrared Imaging**

Conducted over active fire locations will be provided in a subsequent report.

## **General Observations**

- 1. Fairly turbulent flying conditions
- 2. Heavy to light smoke observed over and/or near most of the locations.

## Office of Radiation and Indoor Air (ORIA) Radiological Emergency Response Program Washington, D.C.

Name	Work Phone	Home Phone	Cell Phone
Mike Flynn, ORIA Director	202-343-9356		202-253-5864
Jon Edwards, RPD Director	Out of Office		202-302-1101
Alan Perrin, RPD Deputy Director	202-343-9775		202-279-0376
Tom Peake, CWMR Director (on Jury Duty)	202-343-9765		202-465-5904
<b>Dan Schultheisz,</b> Acting CWMR Director	202-343-9349		
Glenna Shields, CRIO Director	202-343-9849		703-615-5653
Lee Veal, CREM Director	Out of Office	304-799-4145	202-617-4322 (try home # first)

Name	Work Phone	Cell Phone
Valentine Anoma	202-343-9369	202-302-1099
Jeff Blizzard	Out of Office	202-695-5331
Mike Boyd	Out for weekend	202-441-1617
Ray Clark	202-343-9198	202-329-5683
Sara DeCair	202-343-9108	202-738-2871
Rafie Ferguson	202-343-9362	202-295-7666
Darrell Liles	202-343-9550	202-222-5431
Nate McMichael	202-564-0382	202-236-4176
Jennifer Mosser	Out of Office	202-510-0612
Renelle Rae	202-343-9459	202-329-2250
Lowell Ralston	202-343-9831	703-980-5896
Kathryn Snead	202-343-9228	202-536-7896
Ed Tupin	202-343-9383	202-253-8206
Jessica Wieder	202-343-9201	202-420-9353

Secured Telephone/Fax: 202-343-2263 Unclassified in Secured Room: 202-343-9605 Satellite Phone: 01181631549246

## Radiological Emergency Response Program ORIA-R&IE Members Las Vegas, NV

Name	Work Phone	Cell Phone
Ron Fraass, Acting Director	702-784-8202	334-549-9333
Andrea Stafford, Deputy Director	702-784-8203	702-460-8398
Manolo Bay, CERMER Director	702-784-8245	702-494-7047
Gregg Dempsey, Team Commander	Santa Fe ORIA LEAD	702-494-7040
Mark Sells, Team Commander	702-784-8234	702-278-3295

Name	Work Phone	Cell Phone
Alejandra Baer	702-784-8281	702-494-7045
Suzanne Beimer	702-784-8279	702-494-7043
Jesse Bowman	702-784-8236	702-494-7046
Wesley Boyd	Santa Fe	702-494-7042
Emilio Braganza	702-784-8280	702-494-7048
Natalia Brooks	Santa Fe	702-278-6172
Greg Budd	702-784-8273	N/A
Malek Chatila	702-798-2169	702-412-9026
Evelyn Conerly	702-798-2324	N/A
Sandra Elkouz	702-798-2282	N/A
Scott Faller	702-784-8282	702-219-3936
Farshid Farsi	702-784-8263	702-412-9043
Richard Flotard	702-798-2113	N/A
Henry Gerard	702-784-8268	N/A
Fernando Gomez	Santa Fe	702-494-7044
Roger Goodman	Santa Fe	202-306-4907
Paulette Hennessey	702-784-8265	N/A
Rose Houston	702 708-2153	702-279-5638
Lyndsey Kelly	Santa Fe	702-494-7049
Jeff Lantz	702-784-8275	702-493-2266
Christine Matthews	702-798-2121	N/A
Michael Messer	702-784-8242	702-286-5493
Robert Mosley	702-784-8266	N/A
David Musick	702-784-8202	702-278-2284
Holly Pearlman	702-784-8212	702-239-7764
Vivian Rice-Smuin	702-784-8213	702-412-9124
Lynn Seel	702-784-8272	702-278-5195
Douglas Sharp	Santa Fe	702-219-2624
Marsha Smith III	702-784-8205	N/A
Gary Spradlin, Jr.	Santa Fe	702-812-8196

Paul Weeden	702-784-8267	702-412-9094

## Radiological Emergency Response Program ORIA-NAREL Members Montgomery, AL

Name	Work Phone	Cell Phone
Mike Clark, Acting Director	334-270-3404	334-462-9029
John Griggs, CERLS Director	334-270-3450	334-462-9023
Larry Lee, CEMER Director	334-270-3451	334-332-8683
Sam Poppell, Team Commander	334-270-3414	334-546-7214

Name	Work Phone	Cell Phone
Dan Askren	334-270-3422	N/A
Christopher Royce	334-270-7064	N/A
Spencer Hamil	334-270-3417	334-546-5386
Vicki Lloyd	334-270-3467	N/A
Joshua Pate	334-270-3464	334-324-5729
Jewell Smiley	334-270-7073	334-294-6923
Erik Nielsen	334-270-3475	702-715-0603
Steve Taylor	334-270-7072	334-223-7767
Scott Telofski	334-270-3412	334-201-8506
Roy LaPorte, IT	334-270-3466	334-546-3424
Mary Wisdom, QA	334-270-3476	334-467-3122

Iridium Satellite Phone: 011-881631526271 STE Classified Phone: 334-270-7093

## **Regional Radiological Emergency Response Contacts**

Name	Work Phone	Cell Phone
Anthony Honnellio/R1	617-918-1456	617-947-4414 978-808-8857
Michael Barry/R1	617-918-1344	617-257-2251
Paul Giardina/R2	212-637-4010	516-551-7313
Jeanette Eng/R2	212-637-3765	732-991-0702
Mike DeBonis/R2	212-637-3502	973-223-7916
Nidal Azzam/R2	212-637-3748	201-757-8663
Oleg Povetko/R2	212-637-3746	210-323-5590
Carol Febbo/R3	215-814-2076	215-327-6885
Marcos Aquino/R3	215-814-3422	215-514-8357
Todd Rinck/R4	404-562-9062	404-406-5251
Richard Button/R4	404-562-9135	678-520-3272
Jon Richards/R4	404-562-8648	770-853-7255
Lloyd Generette/R4	404-562-9138	N/A
Jack Barnette/R5	312-886-6175	847-903-9549
MaryPat Tyson*/R5	312-886-3006	630-624-1333
Linda Nachowicz/R5	312-886-6337	312-718-6367
Jim Mitchell/R5	312-353-9537	312-802-1231
Regina Milbeck /R6	214-665-6540	214-629-6054
George Brozowski/R6	214-665-8541	972-935-8650
Bob Dye/R7	913-551-7605	913-645-3809
Charles Hooper/R7	913-551-7271	913-645-3809 913-709-2459
Deborah Lebow-Aal/R8	303-312-6223	303-514-6084
Richard Graham/R8	303-312-7080	303-601-2656
Angelique Diaz/R8	303-312-6344	303-949-6641
Mike Bandrowski/R9	415-947-4194	510-290-5426
Ed Snyder/R9	415-947-4186	N/A
Shelly Rosenblum/R9	415-947-4193	925-984-7435
Margaret Waldon/R9	415-972-3987	707-334-6220
Davis Zhen/R10	206-553-7660	206-779-5871

Radiation Managers are in BOLD \* Radiation Manager Backup

## Regional 24-Hour Emergency Phone Numbers (Accesses On-Call OSC)

Region	Phone
1 / Boston	617-723-8928 or 617-223-7265
2 / New York City	800-424-8802
3 / Philadelphia	215-814-9016 or 215-814-3255
4 / Atlanta	404-562-8700
5 / Chicago	312-353-2318
6 / Dallas	866-372-7745
7 / Kansas City	913-281-0991
8 / Denver	303-293-1788
9 / San Francisco	800-300-2193
10 / Seattle	206-553-1263

## **Federal Emergency Operations Center**

Organization	Number	FAX Number
EPA Emergency Operations Center	202-564-3850	202-564-8729
National Response Center	800-424-8802	800-267-1322
Department of Homeland Security	202-612-1618	202-282-8401
DHS Main Operations	202-282-8300 202-282-8000	202-282-8401
FEMA Rep at DHS	202-282-8131	202-282-8782
Federal Emergency Management Agency	540-665-6100 1-800-634-7084	540-665-6175
Department of Energy HQ-DC	202-586-8100	202-586-8485
DOE Nevada	702-295-1381 702-295-0311	702-295-1968
FBI (SIOC)	202-323-3300	202-323-2079 202-323-2082
Nuclear Regulatory Commission	301-816-5100 301-951-0550	301-816-5151
Centers for Disease Control & Prevention	770-488-7100	770-488-7107
ATSDR Atlanta	404-498-0120	770-488-7107
Department of Health and Human Services	202-619-7800	202-619-7870
Department of State	202-647-1512	202-647-0122
Department of Agriculture	202-720-5711	202-205-2915
Food and Drug Administration	301-443-1240	301-827-3333
Department of Transportation	202-366-1863	202-366-3768
EPA at NOC - Watch	202-282-8147	202-501-0162
International Atomic Energy Agency (EOC) email: Official.Mail@iaea.org	011 43 1 2632 000 or 12 USA # 212-963-6010	011 43 1 2600 729 000 USA # 917-367-4046

Las Conchas W	/ildfire	TDD: 0001-11-06	5-01								
Date	Labor	Airfare (rt)	Lodging	Tax	Per Diem	Car	Gas	Lab	Supplies	Notes	Daily Total
Mon 6/27	\$3,455.77	\$590.00	\$82.00	\$12.46	\$106.50	\$69.00	\$500.00 \$	-	\$0.00		\$4,815.73
Tues 6/28	\$14,221.00	\$2,064.80	\$574.00	\$87.22	\$408.25	\$273.00	\$287.27 \$	-	\$85.00		\$18,000.54
Wed 6/29	\$11,841.88	\$0.00	\$574.00	\$87.22	\$497.00	\$274.00	\$0.00 \$	-	\$213.88		\$13,487.98
Thurs 6/30	\$14,853.98	\$991.30	\$838.00	\$106.26	\$603.50	\$344.00	\$117.80	\$0.00	\$109.67		\$17,964.51
Total	\$44,372.63	\$3,646.10	\$2,068.00	\$293.16	\$1,615.25	\$960.00	\$905.07	\$0.00	\$408.55	\$0.00	\$54,268.76

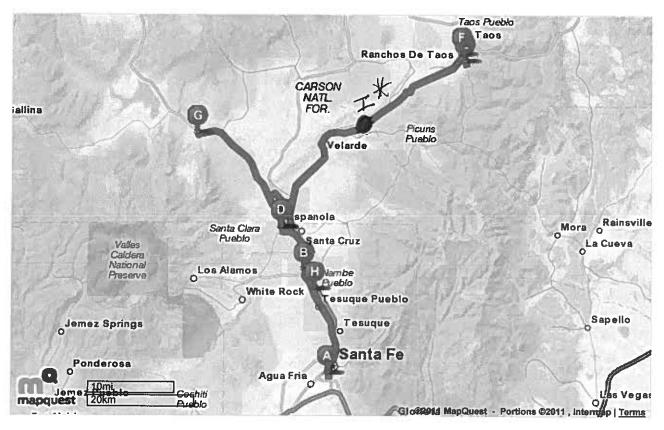
## **EPA Air Sample Locations Northern NM Communities**

### 28-Jun-11

### **NMED Provided Locations**

Location:	Type of Monitor	Location:	Type of Monitor
Runnels Building	Rad Air Sampler	Dave Dutton	Rad Air Sampler
1190 St. Francis Dr.		U.S Army Corps of Engineers	MAP ID G
Santa Fe, NM	Map ID A	4731 Highway 96	
Contact: Michael Ortiz		Abiuquiu, New Mexico	
505-699-0060		(505) 685-4371	
Brenda Romero *	Rad Air Sampler	Dave Dumack	Rad Air Sampler
Espanola Hospital Administrator (IC)		Director of Engineering	MAP ID H
(505) 690-4632	MAP ID D	Buffalo Thunder Resort and Casino	
1010 Spruce Street		30 Buffalo Thunder Trail	
Espanola, NM 87532		Santa Fe, NM 87506	
		(505) 603-6400 cell	
Paul Jones, Engineer Director	Rad Air Sampler	(505) 819-2217 office	
Holy Cross Hospital			
1397 Weimer Road	MAP ID E	Randy Esquibel	MAP ID I
Taos, NM		Regional Administrator	
575-751-5720 cell 575-770-8217		Embudo Clinic	
		Highway 68 # 2243 Rinconada	
Valley Vet MAP ID B	Rad Air Sampler	Embudo, NM 87531	Tel: 505-929-3731
Nambe	bswansondvm@gmail.com		
18126 US 84/285	455-2280	Fire Station #2	Rad Air Sampler
(505) 455-2228	920-4076	123 Santiago Rd.	·
		Taos, NM	MAP ID F
Embudo Station MAP ID	Rad Air Sampler	Eric Montoya	
Sheri Kotowski	serit@cybermesa.com	575-779-7158	
<b>Embudo Valley Environm</b>	ental Monitoring Group		
P.O. Box 291			
Dixon, NM 87527	Phone: (505) 579-4076		

### Total Travel Estimate: 168.41 miles - about 3 hours 45 minutes



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mapquest ma

Trip to:
30 Buffalo Thunder Trl
Santa Fe, NM 87506-2790
168.41 miles
3 hours 45 minutes

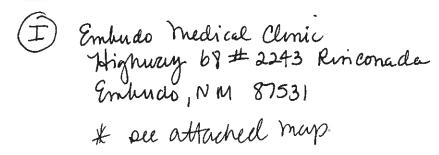
Notes			

A		1190 S Saint Francis Dr Santa Fe, NM 87505-4173	Miles Per Section	Miles Driven
•		1. Start out going SOUTH on S ST FRANCIS DR / US-285 S / US-84 S toward ALTA VISTA ST.	Go 0.02 Mi	0.02 mi
Ð	900RTH 285	2. Make a U-TURN at ALTA VISTA ST onto US-285 N / US-84 N. If you reach COLUMBIA ST you've gone about 0.1 miles too far	Go 17.9 Mi	17.9 mi
		3. 18126 US 84 / 285. Your destination is 0.2 miles past CAMINO DEL OJITO If you reach CR-105 you've gone about 0.2 miles too far		17.9 mi
	A to E	3 Travel Estimate: 17.87 mi - about 20 minutes		
B		<b>18126 Us 84/285</b> Santa Fe, NM 87506-0983	17.9 mi	17.9 mi
		1. Start out going NORTH on US-285 N / US-84 N / JACOB VIARRIAL MEMORIAL HWY toward CR-105 / BOUQUET LN. Continue to follow US-285 N / US-84 N.	Go 7.4 Mi	25.3 mi
4	NORTH 285	2. Turn LEFT onto US-285 N / US-84 N / PASEO DE ONATE. US-285 N is 0.1 miles past CR-96	Go 1.2 Mi	26.5 mi
Ð	(500m) (285)	3. Make a U-TURN at SPRUCE ST onto PASEO DE ONATE / US-285 S / US-84 S.  If you reach N CORONADO AVE you've gone about 0.2 miles too far	Go 0.08 Mi	26.6 mi
		4. 405 PASEO DE ONATE. Your destination is just past VIETNAM VETERANS MEMORIAL PARK RD If you reach CALLE DON FRANCISCO you've gone about 0.1 miles too far		26.6 mi
	B to C	Travel Estimate: 8.73 mi - about 14 minutes		
•		<b>405 Paseo de Onate</b> Espanola, NM 87532	8.7 mi	26.6 mi
•		1. Start out going SOUTHEAST on PASEO DE ONATE / US-285 S / US-84 S toward CALLE DON FRANCISCO.	Go 0.2 Mi	26.8 mi

Ð	NORTH 285	2. Make a U-TURN at DELTA ST onto PASEO DE ONATE / US-285 N / US-84 N.  If you reach CALLE VIGIL you've gone about 0.1 miles too far	Go 0.3 Mi	27.1 mi
4		3. Turn LEFT onto SPRUCE ST. SPRUCE ST is just past VIETNAM VETERANS MEMORIAL PARK RD	Go 0.04 Mi	27.1 mi
		4. 1010 SPRUCE ST is on the LEFT.  If you reach N CORONADO AVE you've gone a little too far		27.1 mi
	C to	D Travel Estimate: 0.54 mi - about 1 minute		
P		1010 Spruce St Espanola, NM 87532-2724	0.5 mi	27.1 mi
•		1. Start out going EAST on SPRUCE ST toward PASEO DE ONATE / US-285 S / US-84 S.	Go 0.04 Mi	27.2 mi
•	285	<ol> <li>Take the 1st RIGHT onto PASEO DE ONATE / US-285 S / US-84 S.         If you are on PASEO DE ONATE and reach N CORONADO AVE         you've gone about 0.2 miles too far</li> </ol>	Go 1.1 Mi	28.3 mi
7		3. Turn SLIGHT RIGHT onto SANDIA DR.	Go 0.1 Mi	28.4 mi
4		4. Turn LEFT. If you are on SANDIA DR and reach US-285 S you've gone a little too far	Go 0.03 Mi	28.4 mi
4		5. Turn LEFT onto N RIVERSIDE DR / US-285 N / US-84 N. Continue to follow N RIVERSIDE DR.	Go 2.8 Mi	31.3 mi
<b>†</b>		6. N RIVERSIDE DR becomes NM-68 N.	Go 40.4 Mi	71.7 mi
•	EAST) 64 EVP	7. Turn RIGHT onto US-64-BYP E / NM-585 E / PASEO DEL CANON E. Pass through 1 roundabout.  US-64-BYP E is 0.2 miles past ROY RD	Go 0.5 Mi	72.2 mi
•		8. Enter next roundabout and take the 1st exit onto WEIMER RD.	Go 0.7 Mi	72.9 mi
		9. 1397 WEIMER RD is on the LEFT.  Your destination is 0.2 miles past MORGAN RD  If you reach MAESTAS RD you've gone a little too far		72.9 mi
	D to I	E Travel Estimate: 45.73 mi - about 1 hour		
9		<b>1397 Weimer Rd</b> Taos, NM 87571-6253	45.7 mi	72.9 mi
•		Start out going NORTH on WEIMER RD toward MORGAN RD.	Go 0.7 Mi	73.5 mi
7	WEST 64 67	2. Enter next roundabout and take the 2nd exit onto PASEO DEL CANON E / US-64-BYP W / NM-585 W. Pass through 1 roundabout.	Go 0.5 Mi	74.1 mi
		3. Turn RIGHT onto PASEO DEL PUEBLO SUR / NM-68.  If you are on PASEO DEL CANON W and reach DEA LN you've		

•	68	gone about 0.3 miles too far	Go 0.3 Mi	74.4 mi
<b>P</b>		4. Take the 1st RIGHT onto CAMINO DE SANTIAGO RD.  If you reach OLD TALPA CANON RD you've gone about 0.1 miles too far	Go 0.04 <b>M</b> i	74.4 mi
		5. 123 CAMINO DE SANTIAGO is on the LEFT.  If you reach GUSDORF RD you've gone about 0.1 miles too far		74.4 mi
	E to I	F Travel Estimate: 1.58 mi - about 3 minutes		
9		<b>123 Camino de Santiago</b> Taos, NM 87571-4425	1.6 mi	74.4 mi
		1. Start out going NORTHWEST on CAMINO DE SANTIAGO RD toward PASEO DEL PUEBLO SUR / NM-68.	Go 0.04 Mi	74.5 mi
4	50UT), 68	2. Turn LEFT onto PASEO DEL PUEBLO SUR / NM-68. Continue to follow NM-68 S.	Go 39.0 Mi	113.5 mi
7	74	3. Turn SLIGHT RIGHT onto NM-74.	Go 3.2 Mi	116.7 mi
4	74	4. Turn LEFT to stay on NM-74.  NM-74 is 0.2 miles past 1653	Go 1.2 Mi	117.8 mi
*	84	5. Turn RIGHT onto US-84 / US-285. Continue to follow US-84.	Go 15.8 Mi	133.6 mi
4		6. Turn LEFT onto CR-165 / PALVADERA RD. Continue to follow CR-165.  CR-165 is 0.9 miles past 1622	Go 0.4 Mi	134.0 mi
		7. Welcome to ABIQUIU, NM. Your destination is just past CR-188 If you reach CR-1626 you've gone a little too far		134.0 mi
	F to C	G Travel Estimate: 59.53 mi - about 1 hour 16 minutes		
9		Abiquiu, NM	59.5 mi	134.0 mi
•		1. Start out going EAST on CR-165 toward CR-188.	Go 0.4 Mi	134.3 mi
rÞ	SOUTH 84	2. Turn RIGHT onto US-84 S. US-84 S is 0.2 miles past CR-188	Go 22.1 Mi	156.4 mi
7	30	3. Turn SLIGHT RIGHT onto NM-30 / LOS ALAMOS HWY. NM-30 is just past N RAILROAD AVE	Go 0.2 Mi	156.6 mi
4		4. Take the 2nd LEFT onto STANLEY A GRIEGO BRIDGE RD / S SANTA CLARA BRIDGE RD / SANTA CRUZ BRIDGE RD.  If you are on NM-30 and reach LEVEE SERVICE RD you've gone about 0.1 miles too far	Go 0.8 Mi	157.5 mi
		5. Turn RIGHT onto S RIVERSIDE DR / US-285 S / US-84 S. Continue to follow US-285 S / US-84 S.		

•	(300m) (285)	US-285 S is just past NM-369	Go 10.4 Mi	167.9 mi
(177) (EXIT		6. Take the BUFFALO THUNDER ROAD exit, EXIT 177, toward CR-89B / CR-89D.	Go 0.2 Mi	168.1 mi
4		7. Turn LEFT onto BUFFALO THUNDER RD. Pass through 1 roundabout.  If you reach US-285 S you've gone about 0.1 miles too far	Go 0.3 Mi	168.4 mi
		8. 30 BUFFALO THUNDER TRL. Your destination is 0.2 miles past E FRONTAGE RD If you reach BUFFALO THUNDER TRL you've gone about 0.3 miles too far		168.4 mi
	G to I	H Travel Estimate: 34.44 mi - about 47 minutes		
φ		<b>30 Buffalo Thunder Trl</b> Santa Fe, NM 87506-2790	34.4 mi	168.4 mi



ASPECT Support Contract # EP-W-08-39 Task Order 036 – Los Alamos Wildfire Response

Period of Performance - June 29, 2011 to Nov. 30, 2011

Task Element 1. This response will follow a gamma-radiation calibration task that was ongoing at the time of the response request from Region 6. As part of the calibration task the flight crew was going to Colorado Springs for a data collection on pre-established concrete pads. Following that data collection the flight crew will continue on to the Santa Fe, NM airport. Upon arrival at Santa Fe this response task begins.

Task Element 3. Data collection and processing.

The contractor will fly a series of data collection passes over designated areas of the Los Alamos area currently being affected by a wildfire. The flight lines for data collection will be provided by the NDT PO or APO on the contract. The flight lines will be issued along with a Mission Order describing the type of data to collect and the communication and processing protocols. It is anticipated that there will be a maximum of five hours of flights each day. For the purpose of this task order it is anticipated that the response will be ongoing for four days. Prior to each flight a new set of flight lines and Mission Orders will be issued to the contractor.

Task Element 5. Demobilization.

Once the PO or APO has determined that the response is complete and no additional data is needed the contractor will be released. Upon release the contractor shall make arrangements to return to its normal fixed base of operations in Waxahatchie, Tx.

Contract #: EP-W-08-039 Opt Yr. 3

Task Order # 36: ASPECT Response to LANL wildfires Period of Performance: 6/29/2011 to 11/30/2011

LINE ITEM CATEGORY	Units	Ra	te	CLII	N Total
0001 Ground Technical Support	120.00	\$	70.00	\$	8,400.00
0002 Commercial Pilot		\$	90.00	\$	-
0003 ATP Pilot	48.00	\$	112.00	\$	5,376.00
0004 Technician System Operator		\$	88.00	\$	-
0005 Expert System Operator	24.00	\$	110.00	\$	2,640.00
0006 Monthly AC Fixed			\$14,000	\$	-
0007 Crew Standby			\$15,230	\$	-
008 AC Maintenance	24.00	\$	452.00	\$	10,848.00
009 ODC's					\$12,500
Total				\$	39,764.00



## **US Environmental Protection Agency Radiological Emergency Response Team**

# Las Conchas Fire Air Sampler Information July 4, 2011

#### Location 1.

Santa Clara Events Center – Location terminated 7/4/11 – see notes 460 N. Riverside Drive Santa Clara, NM N 35 degrees 59.818 min, W 106 degrees 03.994 min.

#### Location 2.

Santa Clara Outlook – Location Terminated 7/3/11, see notes Dirt road off Highway 602 Santa Clara, NM N 35 degrees 57.762 min, W 106 degrees 11.781 min.

#### Location 3.

Black Mesa Golf Course - Location Terminated 7/4/11 - see notes. 115 State Road 399 Santa Clara, NM N 35 degrees 57.614 min, W106 degrees 03.235 min.

#### Location 4.

Buffalo Thunder Casino – Location Terminated 7/4/11 – see notes. 30 Buffalo Thunder Trail Santa Fe, NM 87506 N 35 degrees, 51.739 min, W 105 degrees 59.818 min

#### Location 5.

Valley Veterinary Clinic - Location Terminated 7/4/11 - see notes. 18126 Highway 84/285 Santa Fe, NM N 35 degrees 54.217 min, W 106 degrees, 01.109 min.

#### Location 6.

San Ildefonso Pueblo – Location Terminated 7/3/11, see notes 445 Battleship View Rd.
San Ildefonso, NM
N 35 degrees, 54.459 min, W 106 degrees, 08.194 min.

Location 7.

Espanola Hospital – Location Terminated 7/4/11, see notes 1010 Spruce Street

Espanola, NM

N 35 degrees, 59.811 min, W 106 degrees, 5.246 min.

Location 8.

Runnels State Office Building – Location Terminated 7/4/11 – see notes. 1190 St. Francis Drive

Santa Fe, NM

N 35 degrees, 40.296 min, W 105 degrees, 57.370 min

Location 9.

Cuba Volunteer Fire Department – Location Terminated 7/4/11 – see notes 16B East Cordova Street

Cuba, NM

N 36 degrees, 00.762 min, W 106 degrees 57.709 min.

Location 10.

US Army Corps of Engineers – Location Terminated 7/4/11 – see notes 4734 Hwy. 96 Abiqui, NM

N 36 degrees, 14.436 min, W 106 degrees, 25.699 min.

Location 11.

Water Sanitation District – Location Terminated 7/4/11 – see notes 827 State Highway 22 Pena Blanca, NM N 35 degrees, 34.411 min, W 106 degrees, 20.076 min.

Location 12.

Cochiti Town Hall (Cochiti Pueblo) **(This location has a duplicate air sampler.)** – Location Terminated 7/4/11 – see notes. 6515 Hoochaneetsa Blvd, Suite A Cochiti Lake. NM

N 35 degrees, 38.789 min, W 106 degrees, 20.159 minutes

Air Sampler Notes: For the Las Conchas Fire Response, 10 of the 12 air sampling stations operated by the EPA Radiological Response Team (RERT) were collected successfully on July 4, 2011. Two air samplers were turned off on July 3 (San Ildefonso Pueblo and Santa Clara Outlook). All remaining air samplers had no issues overnight and were terminated after sample collection. Teams were instructed to return their air sampler units to the Mobile Command Post location at the Espanola Guard Armory. Samples were turned over to EPA Region 6 START for shipment to the contractor laboratory, Eberline Services, in Oak Ridge, TN.

RERT is staging from the Espanola Guard Armory, 2011 Industrial Park Road, Espanola, NM. We terminated our operation at 1 pm on July 4, 2011, and will be moving our mobile command post and federal vehicles back to our hotel in Santa Fe. We will begin the drive to Las Vegas on Tuesday, July 5.

Gregg Dempsey
Radiological Emergency Response Team Commander
U.S. Environmental Protection Agency
Radiation and Indoor Environments National Laboratory
Las Vegas, Nevada

dempsey.gregg@epa.gov (702) 784-8232 office (702) 784-8231 facsimile

#### Las Conchas Fire Update – June 28, 2011 (1800hrs)

- Current fire size is estimated at 60,741 acres, is 0% contained, and fire crews are working to protect structures and contain the fire using burnout methods to prevent the fire from spreading.
- The acting Los Alamos County Administrator issued an evacuation order for the city of Los Alamos, and NM 502 westbound into Los Alamos is now closed to all motorists.
- The Fire is NOT on Los Alamos National Laboratory (LANL). Wind direction is changing but the fire is not heading for LANL currently.
- LANL is closed due to the fire. All laboratory facilities are closed for all activities, and nonessential employees are directed to remain off site.
- EPA OSC Fife is present at the State EOC and START resources (8 personnel) are ready to locate medium volume air samplers, counters, SAM, Model 19's, once siting decisions are determined.
- Placement of the approximately 30 air samplers/monitors is being developed by the State as well as DOE. The placement will be based on 'down-winders'. Down-winders are loosely described as individuals, organizations, and communities who have strong interests in the operations and safety at the LANL. This does include neighboring tribes. It also includes communities represented by activists in the area who have been the most vocal about the LANL.
- Radiological Emergency Response Team (ORIA-LV) ETA on site is Wednesday, June 29, at noon. EPA, via regional and ORIA-LV will be deploying approximately 24 additional stations. The locations are being coordinated with State and DOE. Tribal coordination is imperative and the local DOE reps are in the process of coordination.
- LANL has 60 sampling and monitoring stations already established for normal operations. These are on the LANL property as well as off-site. A Radiological Assistance Program Team is deploying a limited number of additional stations.
- ASPECT is prepping to fly. The plane is currently in Las Vegas, NV. Flight plans are being developed for verification by the environmental operations in the State EOC. Original flight to get a "smokey" background. Fly-over routes have been proposed by ASPECT and are currently being reviewed by knowledgeable representatives from the State and DOE. Additionally, routes will have to be cleared with FAA, and with LANL to avoid secure and sensitive areas.

- <u>Background</u>: The fire started southwest of Los Alamos National Laboratory (LANL) and traveled in a direction that threatened LANL. LANL was closed to all but essential personnel and the City of Los Alamos was evacuated. The Las Conchas Wildfire was the largest in New Mexico history, at approximately 124,000 acres. A significant threat to human health and the environment due to this huge wildfire was radioactive material release from legacy sites within LANL, where soil is contaminated with radioactive isotopes. A firestorm within the wildfire could have entrained the contamination and moved it offsite.
- <u>Concerns</u>: Significant concerns about the impact of the Las Conchas Wildfire on LANL and
  potential releases of radioactive waste and materials into surrounding communities, including
  tribal communities, prompted emergency response operations from EPA Region 6. The
  response team devised and implemented air monitoring and sampling efforts to protect
  communities surrounding LANL, including several pueblos, the cities of Los Alamos and
  White Rock, and National Forests and Monuments.
- Emergency Response: EPA Region 6 rapidly assessed the wildfire landscape and coordinated closely with the New Mexico Environment Department, EPA's Radiological Emergency Response Team, and several pueblos to determine optimum locations to deploy 12 air sampling stations and coordination of ASPECT monitoring missions around the perimeter of the fire.
- <u>Air Sampling</u>: Six rounds of air sampling, with 56 individual samples from private, public and tribal lands, were collected during the response. The rapid response and air sampling effort ensured the timely notification of air quality data to citizens.
- <u>ASPECT</u>: EPA Region 6 coordinated ASPECT monitoring missions around the perimeter of the fire, which included several potentially impacted cities and tribal lands. All data was expedited and analyzed in order to inform the public as fast as possible that no radiation levels significantly above background levels were detected.

#### **REGION 6 EXECUTIVE SUMMARY**

TOPIC: Las Conchas Wildfire

DATE: August 15, 2013 CONTACT: Wes McQuiddy, 214-665-6722

PURPOSE/ACTION NEEDED: Historical Information

**DEADLINE DATE:** 

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#### **BACKGROUND:**

The fire started southwest of Los Alamos National Laboratory (LANL) and traveled in a direction that threatened LANL. LANL was closed to all but essential personnel and the City of Los Alamos was evacuated. The Las Conchas Wildfire was the largest in New Mexico history, at approximately 124,000 acres. A significant threat to human health and the environment due to this huge wildfire was radioactive material release from legacy sites within LANL, where soil is contaminated with radioactive isotopes. A firestorm within the wildfire could have entrained the contamination and moved it offsite.

EPA Region 6 rapidly assessed the wildfire landscape and coordinated closely with the New Mexico Environment Department, EPA's Radiological Emergency Response Team, and several pueblos to determine optimum locations to deploy 12 air sampling stations and coordination of ASPECT monitoring missions around the perimeter of the fire.

Six rounds of air sampling, with 56 individual samples from private, public and tribal lands, were collected during the response. The rapid response and air sampling effort ensured the timely notification of air quality data to citizens.

EPA Region 6 coordinated ASPECT monitoring missions around the perimeter of the fire, which included several potentially impacted cities and tribal lands. All data was expedited and analyzed in order to inform the public as fast as possible that no radiation levels significantly above background levels were detected.

**CURRENT STATUS:** No further action.

ENVIRONMENTAL/PUBLIC HEALTH CONCERNS: No further action.

#### **COMMUNITY CONCERNS:**

Significant concerns about the impact of the Las Conchas Wildfire on LANL and potential releases of radioactive waste and materials into surrounding communities, including tribal communities, prompted emergency response operations from EPA Region 6. The response team devised and implemented air monitoring and sampling efforts to protect communities surrounding LANL, including several pueblos, the cities of Los Alamos and White Rock, and National Forests and Monuments.

**RECOMMENDATIONS:** No further action.

#### REGION 6 EXECUTIVE SUMMARY

**TOPIC:** Las Conchas Wildfire

DATE: August 15, 2013 CONTACT: Wes McQuiddy, 214-665-6722

PURPOSE/ACTION NEEDED: Historical Information

**DEADLINE DATE:** 

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#### **BACKGROUND:**

The fire started southwest of Los Alamos National Laboratory (LANL) and traveled in a direction that threatened LANL. LANL was closed to all but essential personnel and the City of Los Alamos was evacuated. The Las Conchas Wildfire was the largest in New Mexico history, at approximately 124,000 acres. A significant threat to human health and the environment due to this huge wildfire was radioactive material release from legacy sites within LANL, where soil is contaminated with radioactive isotopes. A firestorm within the wildfire could have entrained the contamination and moved it offsite.

EPA Region 6 rapidly assessed the wildfire landscape and coordinated closely with the New Mexico Environment Department, EPA's Radiological Emergency Response Team, and several pueblos to determine optimum locations to deploy 12 air sampling stations and coordination of ASPECT monitoring missions around the perimeter of the fire.

Six rounds of air sampling, with 56 individual samples from private, public and tribal lands, were collected during the response. The rapid response and air sampling effort ensured the timely notification of air quality data to citizens.

EPA Region 6 coordinated ASPECT monitoring missions around the perimeter of the fire, which included several potentially impacted cities and tribal lands. All data was expedited and analyzed in order to inform the public as fast as possible that no radiation levels significantly above background levels were detected.

#### **CURRENT STATUS:**

#### **ENVIRONMENTAL/PUBLIC HEALTH CONCERNS:**

#### **COMMUNITY CONCERNS:**

Significant concerns about the impact of the Las Conchas Wildfire on LANL and potential releases of radioactive waste and materials into surrounding communities, including tribal communities, prompted emergency response operations from EPA Region 6. The response team devised and implemented air monitoring and sampling efforts to protect communities surrounding LANL, including several pueblos, the cities of Los Alamos and White Rock, and National Forests and Monuments.

#### **RECOMMENDATIONS:**

## U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Las Conchas Wildfires - Removal Polrep



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VI

Subject: POLREP #1

**Coordination and Sampling** 

Las Conchas Wildfires

Santa Fe, NM

Latitude: 35.5705630 Longitude: -106.0873716

**To:** Ragan Broyles, Superfund Division

Dana Tulis, U.S. EPA HQ

Art Volmer, NM

**From:** Greg Fife, OSC

**Date:** 6/30/2011

**Reporting Period:** 6/27/2011 - 6/30/2011

#### 1. Introduction

#### 1.1 Background

Site Number: 06BJ Contract Number: D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: Emergency

**Response Lead:** EPA **Incident Category**:

NPL Status: Non NPL Operable Unit:

Mobilization Date: 6/27/2011 Start Date: 6/27/2011

Demob Date: Completion Date:

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

#### 1.1.1 Incident Category

Emergency Response.

#### 1.1.2 Site Description

Concerns about the impact of Las Conchas Wildfire impacting the Los Alamos National Laboratory (LANL) and potential releases of radioactive waste and materials into surrounding communities. The cause of the fire is

still being investigated. The fire started south west of LANL and traveled in a direction that threatened LANL. LANL was closed to all but essential personnel. The city of Los Alamos was evacuated.

The fire is being contained and is presenting a much lower threat to LANL. The 'black areas' and fire breaks that have been created since the Cerro Grande fire from 11 years ago have been effective in protecting the LANL property. The front of the fire has passed LANL, although fire still is adjacent to the LANL perimeter. Conditions have improved enough that the LANL expects to reopen on Saturday, 7/2. Then the employees will enjoy the remainder of the holiday weekend off. The evacuation of the city will precede the lab opening. The weather report is indicating that the last of the strong winds will end today and better conditions will remain in the area for several days.

#### 1.1.2.1 Location

The location is the area surrounding the LANL. That includes several tribal lands, the cities of Los Alamos and White Rock, National Forests and Monuments.

#### 1.1.2.2 Description of Threat

The POTENTIAL threat is from radioactive material that could be released due to the impact of wildfires. There are legacy sites within LANL where soil is contaminated with radioactive isotopes. A firestorm within the wildfire could entrain the contamination and move it offsite. A wildfire without the firestorm has a lesser potential for lifting the contamination, not enough energy.

Within LANL property is a well known area (Area G) that is the location of containerized radioactive waste. This area is maintained and operated by LANL. Engineering controls are in place to prevent fire effecting the stored wastes including specially designed casks, shields, 'pigs', solidification, as well as fire breaks.

Another potential threat is from the facilities on LANL that use radioactive materials. Since the control of these materials is structured, the potential threat from these facilities is less.

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

At this time, the threat is only potential. Only small fires have occured on the LANL property and those were quickly extinguish. Those smal fires were well away from any legacy site, waste area, or facilities.

The first rounds of air samples have been collected. Analytical results will be received within days.

The initial flights of the ASPECT flying laboratory have found no radiaton levels above the background levels.

#### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Narrative

EPA technical assistance contractor (START) and EPA's Radiological Emergency Response Team from the Office of Radiation and Indoor Air - Las Vegas (ORIA-LV) are operating air samplers around the area. SInce there is no fire or plume from any radioactive area, the locations of the samplers are based on population centers and other criteria. Tribal lands including pueblos and sacred areas are a concern and air samplers are strategically placed to collect data there. Samples will be sent to laboratories to determine the concentration and activity. Among the parameters

analyzed for are gross alpha radiation, gross beta radiation, a gamma scan, and specific isotopes that are or were at LANL.

The samples will be shipped for laboratory analysis as soon as practical but there is a need to allow the naturally occuring isotopes with short half-lives time to disapate. This includes naturally occuring radon, radioactive carbon, etc; The radioactive carbon is the result of the burning of trees in the wildfire. Trees naturally have radioactive carbon. These isotopes must disapate before the isotopes of concern can be identified and quantified. So, the delivery of the sample results is delayed due to the necessary step. There are also some analytical test methods that require even longer times for the sample to be prepared for measurement.

The EPA ASPECT plane is flying over the perimeter of LANL and over the cities of White Rock and Los Alamos. Monitoring data is being provided to New Mexico Environment Department for public health review and assessment. Initial results have shown only background levels.

EPA sampling information will be made publically available on the New Mexico Environmental Department website at http://www.nmenv.state.nm.us.

#### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

#### 2.2.1.1 Planned Response Activities

Additional air samplers are being deployed and will continue as needed.

ASPECT will conduct additional flights.

The fire is being contained and is presenting a much lower threat to LANL. The 'black areas' and fire breaks that have been created since the Cerro Grande fire from 11 years ago have been effective in protecting the LANL property. The front of the fire has passed LANL, although fire still is adjacent to the LANL perimeter. Conditions have improved enough that the LANL expects to reopen on Saturday, 7/2. Then the employees will enjoy the remainder of the holiday weekend off. The evacuation of the city will precede the lab opening. The weather report is indicating that the last of the strong winds will end today and better conditions will remain in the area for several days.

As the threat of the fire impacting LANL, the EPA sampling activities will be adjusted appropriately. The State EOC will go to a shortened schedule through the holiday weekend. EPA will work out of mobile command posts and vehicles during the times when the EOC is not manned and security is not available.

- 2.3 Logistics Section
- 2.4 Finance Section
- 2.5 Safety Officer

Т

- 2.6 Liaison Officer
- 2.7 Information Officer

#### 2.7.1 Public Information Officer

MEDIA ADVISORY: LANL Announces New Hours of Operation for Joint Information Center in Santa Fe

LOS ALAMOS, New Mexico June 29, 2011 – Los Alamos National Laboratory announced that beginning today, staff at the Joint Information Center

will respond to inquiries regarding the Las Conchas Fire from the general public and the media from 6 a.m. to 10 p.m. MDT daily.

The JIC is located at the Regional Development Corporation, 2209 Miguel Chavez Rd., in Santa Fe.

Media should call 505-820-1226 for updates and monitor

and monitor

www.nmfireinfo.com for official fire updates.

- 3. Participating Entities
  - 3.1 Unified Command
  - 3.2 Cooperating and Assisting Agencies
- 4. Personnel On Site

EPA Resources: 2 Federal On-Scene Coordinators.

1 RERT On-Site Commander from ORIA-LV

7 members of the EPA RERT

1 FPA PIO

1 EPA ASPECT plane and crew

2 EPA ASPECT Support Team Members

1 EPA Data Manager

1 EPA Data Management Team member

7 START contractor personnel

- 5. Definition of Terms
- 6. Additional sources of information
  - 6.1 Internet location of additional information/reports
  - 6.2 Reporting Schedule
- 7. Situational Reference Materials



# **US Environmental Protection Agency Radiological Emergency Response Team**

Los Conchas Fire Air Sampler Placement June 30, 2011

Location 1. Santa Clara Events Center 460 N. Riverside Drive Santa Clara, NM GPS Location Pending

Location 2. Santa Clara Outlook Dirt road off Highway 602 Santa Clara, NM GPS Location Pending

Location 3.
Santa Clara Golf Course
115 State Road 399
Santa Clara, NM
GPS Location Pending

Location 4.
Buffalo Thunder Casino
30 Buffalo Thunder Trail
Santa Fe, NM 87506

**GPS Location Pending** 

Location 5. Valley Veterinary Clinic 18126 US 84/285 Santa Fe, NM GPS Location Pending

Location 6. San Ildefonso Pueblo 445 Battleship View Rd. San Ildefonso, NM GPS Location Pending Location 7.
Espanola Hospital
1010 Spruce Street
Espanola, NM
GPS Location Pending

Location 8.
Runnels State Office Building
1190 St. Francis Drive
Santa Fe, NM
GPS Location Pending

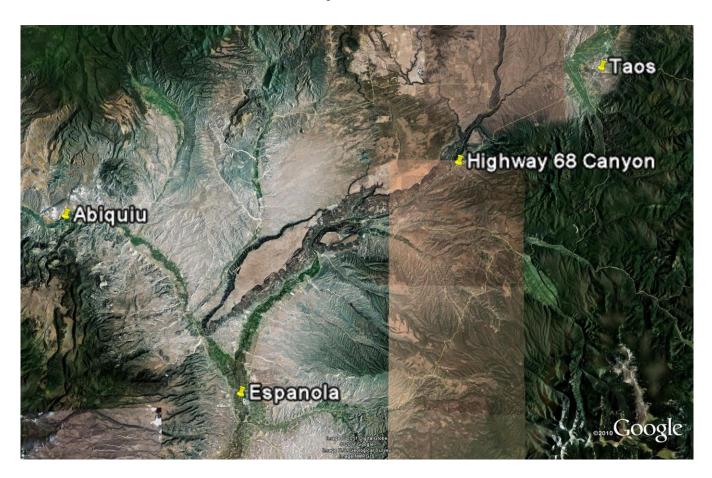
Location 9.
Cuba Volunteer Fire Department
16B East Cordova Street
Cuba, NM
GPS Location Pending

Location 10. US Army Corps of Engineers 4734 Hwy. 96 Abiqui, NM GPS Location Pending

Location 11.
Water Sanitation District
827 State Highway 22
Pena Blanca, NM
GPS Location Pending

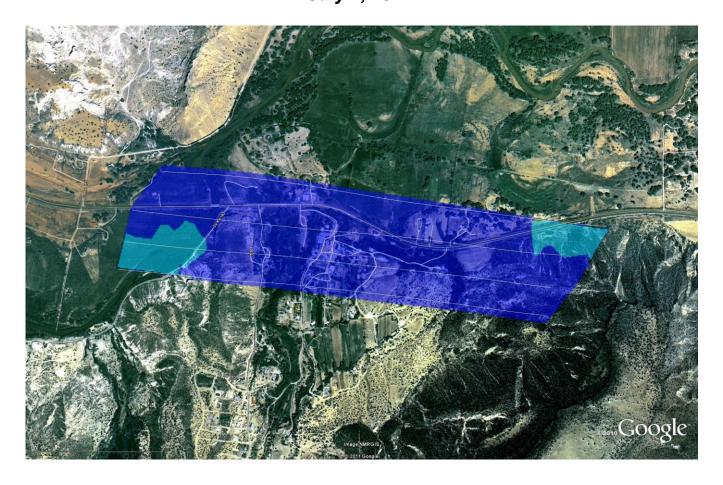
Location 12.
Cochiti Town Hall (Cochiti Pueblo)
6515 Hoochaneetsa Blvd, Suite A
Cochiti Lake, NM
GPS Location Pending

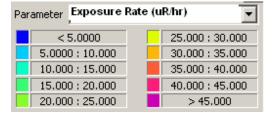
# Survey Areas July 1, 2011





# Abiquiu Survey Area Exposure Rate Contour Map July 1, 2011





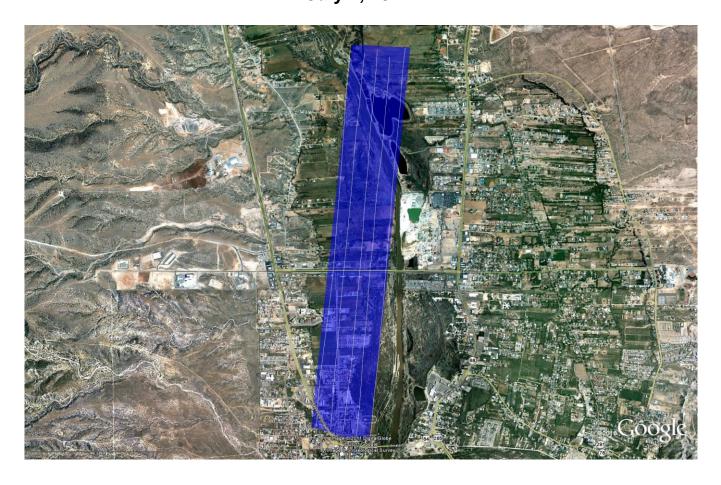


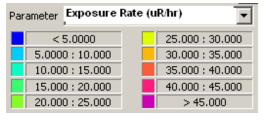
#### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 6  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

# Espanola Survey Area Exposure Rate Contour Map July 1, 2011







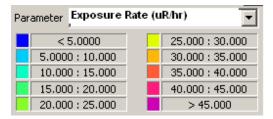
#### Flight Parameters

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 5  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

# Highway 68 Canyon Survey Area Exposure Rate Contour Map July 1, 2011





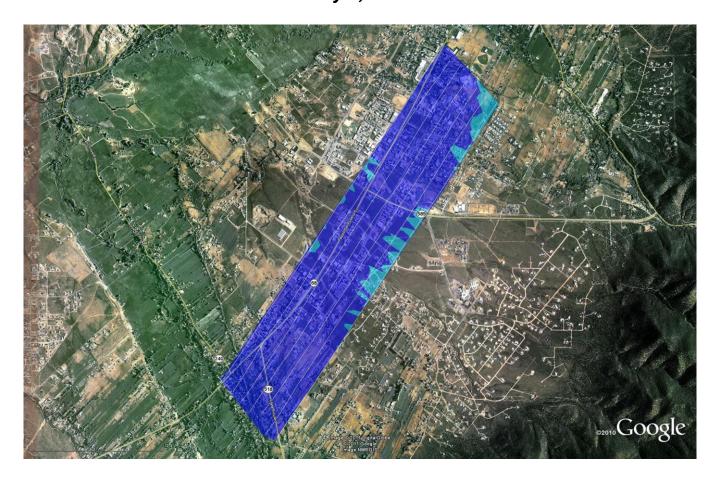


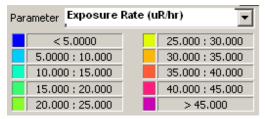
#### **Flight Parameters**

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 8  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

# Taos Survey Area Exposure Rate Contour Map July 1, 2011







#### **Flight Parameters**

1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 5  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

# **Brief Discussion of Results**

#### Chemical

No significant chemical detections. Minor detections of the following chemicals were measured from greatest to lowest concentrations:

- 1. Ozone,
- 2. Formic acid,
- 3. PAN (peroxyacetyl nitrate, "smog"),
- 4. Methanol, and
- 5. Ammonia

These minor detections are consistent with what is normally found in natural fires.

# Radiological

No significant radiological detections.

## **Photography**

Aerial photographs were collected over Abiquie (5), Espanola (9), Taos (10) and active fire areas (15).

# **Infrared Imaging**

Conducted over active fire locations will be provided in a subsequent report.

# **General Observations**

- 1. Fairly turbulent flying conditions
- 2. Heavy to light smoke observed over and/or near most of the locations.



# State of New Mexico

Susana Martinez
Governor

July 11, 2011

Mr. Sam Coleman Director, Superfund Division EPA Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Dear Sam,

On behalf of the people of New Mexico, thank you for the assistance provided by the Environmental Protection Agency during the 2011 Las Conchas Wildfire in Los Alamos, New Mexico. The EPA did not hesitate to make resources available to the New Mexico Environment Department during this crisis.

I would like to specifically thank your department for the use of the ASPECT Aircraft for monitoring air quality over the region. Your team of experts did a stellar job of providing real-time data of radiation levels in the affected areas. As expected, the radiation levels were well within normal ranges. However, the ASPECT data was vital in our job to provide immediate transparency to the public about the status of radiation levels over the wildfire. Our ability to take that data and post it to the New Mexico Environment Department's website was critical to providing that transparency. The ASPECT Aircraft also gave the State of New Mexico a crucial tool to verify information coming out of Los Alamos National Laboratory.

Your staff members who worked long hours over the 4<sup>th</sup> of July holiday to ensure the safety of our citizens also deserve a special thank you. This includes, but is not limited to, your Incident Command Team, Air Monitor Technicians, Radiological Response Team, Data Management Team Members, ASPECT Aircraft personnel, and Public Information Officers. I recognize their work is still ongoing, as data from air monitor locations sent out-of-state for analysis continues to return to our team members.

The cooperation between state and federal agencies is essential during any crisis. I could not have hoped for better cooperation between our state employees and the EPA personnel on the ground in New Mexico. I have received numerous reports about the professionalism of your staff in the field. With the ever-present possibility of any kind of future crisis, it is reassuring to know that state and federal agencies can work efficiently and effectively under pressure.

Again, you have my most sincere thanks for your efforts.

Sincerely,

Susana Martinez Governor

SM/kr



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

#### State of New Mexico ENVIRONMENT DEPARTMENT

# Office of the Secretary

Harold Runnels Building 1190 Saint Francis Drive, PO Box 5469 Santa Fe, NM 87502-5469 Telephone (505) 827-2855 Fax (505) 827-2836 www.nmenv.state.nm.us



DAVE MARTIN Secretary RAJ SOLOMON, P.E. Deputy Secretary

#### **NEWS RELEASE**

**JUNE 28, 2011** 

**Contact:** Jim Winchester, Public Information Officer (505)231-8800 / jim.winchester@state.nm.us

#### **Environment Department Monitoring Air Quality In Los Alamos**

Members of the New Mexico Environment Department (NMED), in conjunction with Los Alamos National Laboratory (LANL), the Environmental Protection Agency (EPA) and the U.S. Forest Service are actively monitoring air quality around Los Alamos as a result of the ongoing Las Conchas Fire.

During this fire event, the Environment Department staff will conduct continuous air monitoring, maintain monitoring capabilities and expedite analysis of the particulate measurements. In addition to sampling devices at fixed locations, the Bureau has a mobile, solar powered, air monitoring station that can be deployed at optimum locations without regard for an external power supply. This device is currently located at the Los Alamos Airport.

Environment Department staff is conducting continuous air quality monitoring for radioactive particles and tritium using low-volume air pumps. Particulates are collected on filters and analyzed for radioactive particles, metals and organic compounds. High-volume air pumps are also deployed at environmental restoration clean-up sites and decommissioning and demolition operations to independently monitor particulate emissions in air.

LANL personnel are currently conducting air monitoring for particulate matter and radionuclides around Los Alamos. Current air quality index information for conditions at LANL can be viewed at <a href="http://environweb.lanl.gov/Teom/teom.asp">http://environweb.lanl.gov/Teom/teom.asp</a>. Historical data and monitoring station location can be viewed at <a href="http://environweb.lanl.gov/newnet/gamma/stabyloc.aspx">http://environweb.lanl.gov/newnet/gamma/stabyloc.aspx</a>. The Environment Department, working with the EPA and LANL, is in the process of moving four additional particulate monitors from California to northern New Mexico. The Environment Department will work with the Forest Service and EPA to determine where those monitors should be placed to maximize their effectiveness.

In addition, LANL has radiation monitors that can be used to monitor for possible radiation contamination from the fire. The Environment Department is also working with the EPA and LANL to obtain

additional ground-based monitors and an airborne monitor. Some of those monitors will be set up in Santa Fe and Espanola.

During the Cerro Grande fire of 2000, there was considerable public concern regarding the potential release of radionuclides from LANL. The following risk summary is from the "2002 Fact Sheet: Cerro Grande Fire Releases to Air" which may be viewed at <a href="ftp://ftp.nmenv.state.nm.us/www/doe/publications/lanl/2002FireAirFactSheet.pdf">ftp://ftp.nmenv.state.nm.us/www/doe/publications/lanl/2002FireAirFactSheet.pdf</a>

"The primary health risks during the Cerro Grande fire were associated with breathing materials released into the air. It was estimated the risk of cancer from breathing any LANL-derived chemical or radioactive material that may have been carried in the smoke plume to be less than 1 chance in 10 million. Potential exposures in the surrounding communities to LANL-derived chemicals that are not carcinogenic were about 10 times lower than acceptable intakes established by the U.S. Environmental Protection Agency (EPA). The risk of cancer from breathing chemicals and radioactive materials in and on the natural vegetation that burned in the Cerro Grande Fire was greater than that from LANL derived materials, but still less than 1 chance in 1 million. The vegetation that burned contained naturally occurring chemicals and radioactive materials and radioactive fallout produced during atmospheric tests of nuclear weapons. These materials and the risks they posed are present during any forest fire. The evidence suggests that some adverse health effects did result from breathing high concentrations of particulate matter in the smoke. Such exposures are associated with any forest fire. Deposition of LANL-derived chemicals and radioactive materials from the smoke plume to the soil was minimal.

Additional information may be obtained from other reports published by the department at <a href="http://www.nmenv.state.nm.us/doe\_oversight/pubs.htm">http://www.nmenv.state.nm.us/doe\_oversight/pubs.htm</a>

###



## **United States Environmental Protection Agency**

Office of Emergency Management National Decontamination Team Erlanger, KY 41018

June 2011

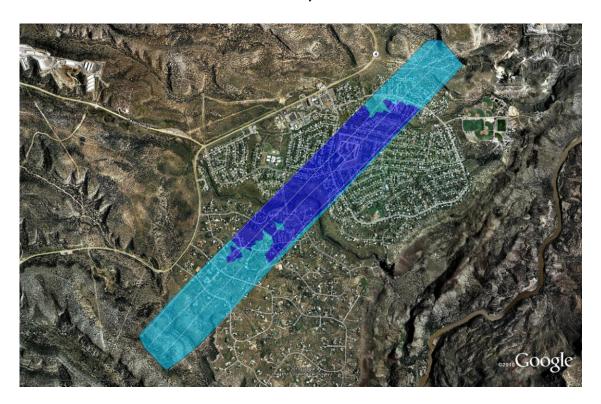
# Revised Mission Report 1 – June 29, 2011 Las Conchas Survey Preliminary Report

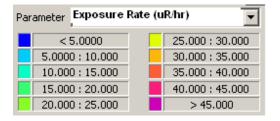
# For Official Use Only

EPA ASPECT Team

Mark Thomas John Cardarelli II Timothy Curry Paul Kudarauskas

# White Rock Area Exposure Rate Contour Map June 29, 2011







#### Flight Parameters

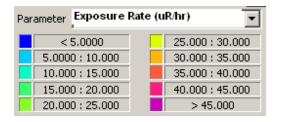
1000 ft altitude 500 ft line spacing 110 knots 1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 9  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

This image should not be used independently to assess potential health risks. Additional information is necessary to make appropriate health-related decisions.

# Los Alamos East Area Exposure Rate Contour Map June 29, 2011







#### Flight Parameters

1000 ft altitude500 ft line spacing110 knots1 second acquisition time

Radiation can be measured in exposure rate. Typical background exposure rates in New Mexico range from 5 - 20  $\mu R/hr$ . The maximum exposure rate for this survey was 12  $\mu R/hr$ . This is in the normal range. The exposure rate contour map indicates estimated radiation exposure rates on the ground and can be used to identify hazardous levels of radiation. This map indicates that there are no hazardous levels in the area surveyed.

This image should not be used independently to assess potential health risks. Additional information is necessary to make appropriate health-related decisions.

# **Brief Discussion of Results**

All chemical and radiological data collected over the Los Alamos East and White Rock Areas showed no significant detections.

All chemical data over the White Rock area showed no significant detections. No smoke was observed over both locations resulting in no chemical detections.

If there are further questions, please contact:
Greg Fife
R6 EPA On-Scene Coordinator
(214) 789-2879

#### Sam's Bullets

#### Status as of 6/13/11 am

- National and local news sources report that the fire has not crossed into NM. Instead, the USFS and local state fire agencies are igniting small controlled fires to diminish natural fuel from brush and grasses, just in case. R6 PDO attempted to call on June Art Vollmer, NMED RRT rep on Jun 11 and 12 but still waiting for a call back.
- All but one real-time air monitoring stations around the state are reporting "good" air quality index with very PM 2.5. One USFS station in Reserve, NM is reporting "moderate" with a high 1- hr avg of 56 ug/m3 and a 24-hr avg of 31.4 ug/m3. USFS stations are measuring PM and the NMED stations around the state are measuring a range, some including PM but also CO, NOx, SO2, etc.
- 6SF-P air monitoring inventory includes:
- 8 DataRAMs for particulate matter
- 4 MultiRAEs for toxic gases
- 8 AreaRAEs for toxic gases
- 8 Multiwarn II for toxic gases

We also should have a large number of high and mass volume samplers but those require the media to be sent to labs for analysis after a 16 to 24 hr composite.

#### **REGION 6 EXECUTIVE SUMMARY**

TOPIC: Arizona / New Mexico Wildfire

DATE: June 14, 2011 CONTACT: Wes McQuiddy x6722

PURPOSE/ACTION NEEDED: For Information

DEADLINE DATE: 12:00pm RA Briefing

BACKGROUND: The Arizona wildfire, known as the Wallow Fire, has burned approximately 732

square miles. The fire is about 10% contained, and is anticipated to be15% contained today. The fire is the second-largest in state history and has destroyed 491 buildings.

CURRENT STATUS: National news is reporting that firefighters have stopped the northward advance of the wildfire in Arizona and are now focusing on its eastern flank, which has burned its way into New Mexico and is creating large plumes of smoke across parts of New Mexico.

ENVIRONMENTAL/PUBLIC HEALTH CONCERNS: Smoke generated by wildfires is primarily made up of small particles, gases, and water vapor, with trace amounts of hazardous air pollutants. Most harmful are the particles (or particulate matter) smaller than 2.5 micrometers in diameter (70 micrometers is the diameter of a human hair). If these particles are inhaled deeply into the lungs, they can damage lung tissue and cause respiratory and cardiovascular problems.

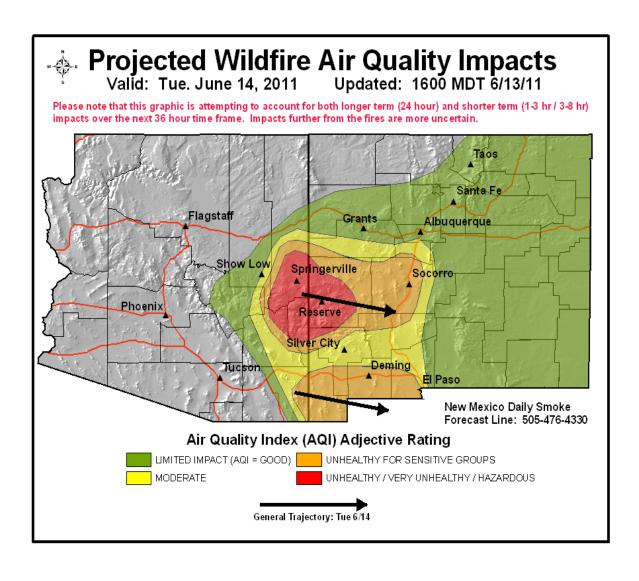
#### **TECHNICAL CONCERNS:**

- NMED Regional Response Team representative, Art Vollmer, indicated that NMED has enough air monitors on hand covering the affected areas. Information from NMED field personnel and air monitors indicate that conditions are normal.
- R9 is not involved in, and has not been asked by the State of Arizona or their tribes, to assist in the Arizona fire.
- The Environmental Response Team (ERT) has deployed 4 EBAM's (real time particulate matter monitors) to the Joplin, MO, tornado response, and only has 1 EBAM left available.
- 6SF-P's air monitoring inventory includes; 8 DataRAMs for particulate matter, 4 MultiRAEs for toxic gases, 8 AreaRAEs for toxic gases, and 8 Multiwarn II for toxic gases

COMMUNITY CONCERNS: Air quality impacts of smoke from the wildfire have been raised by some tribes and pueblos in New Mexico.

RECOMMENDATIONS: None at this time.

 $\textbf{W}_{\text{orkforce Diversity}}, \textbf{E}_{\text{nvironmental Stewardship}} \quad \textbf{C}_{\text{haracter}}, \textbf{A}_{\text{ccountability}}, \textbf{R}_{\text{espect}}, \textbf{E}_{\textbf{x}}_{\text{cellence}}$ 



# THIS REQUEST IS FOR HAZARDOUS MATERIALS RESPONSE ONLY DO NOT CHARGE YOUR OIL (OPA) RESPONSE TO THIS SITE ID

SITE SPECIFIC Rev.10/01/2010 Is this related to an already existing site Yes\* No. \* If yes, attach narrative explanation for tracking cost separately and contact Lydia Johnson to request a SCORPIOS report to assure you are notifying all involved parties regarding this site. SSID Request Date: 06/26/11 SSID Number Assigned: A6BJ Requested By: Eric Delgado Mail Code: 6SF-PR Phone: 5-2703 CERCLIS Site Name: La Conchas Wildfires (Exactly as it appears in CERCLIS) EPA I.D. No.: State: NM CERCLIS Location: 13 Bataan Blvd Zip Code: 87508 County: Santa Fe City: Sante Fe Establish the following accounting strings in IFMS. Travel and Payroll ACTION CODES for the following: **BFYS ACTION CODES** 2011 CR, JU, PJ, RS Approved: X Yes No By: Robert Contreras 06/28/2011 @0922 Section Chief Accounting Sec. (6MD-RA) or Designee



# Projected Wildfire Air Quality Impacts

Updated: 1600 MDT 6/13/11 Valid: Tue. June 14, 2011

Please note that this graphic is attempting to account for both longer term (24 hour) and shorter term (1-3 hr / 3-8 hr) impacts over the next 36 hour time frame. Impacts further from the fires are more uncertain.

